1. APPENDIX APPLICATION. The material contained in these appendices applies to support criteria contained in the several chapters of the handbook. Appendix material includes:

a. Appendix 1, Paragraph 2. Glossary. A listing of special terms and abbreviations to explain their meaning and application to procedures and criteria.

b. Appendix 2. Procedures Charts. These charts depict secondary area obstacle problems, solutions, methods of computing glide slope threshold crossing heights, glide slope antenna location, applications of ILS/PAR obstacle clearance criteria, and an analysis of obstacle clearances.

c. Appendix 3. This appendix contains lists of Figures, a list of Tables, and a list of References to other publications.

d. Appendix 4. Tangents. A complete list of tangents for angles from 0.0 to 9.0 degrees in hundredths of degrees for application in solving glide slope problems.

e. Appendix 5. Approach Lighting. This appendix contains descriptions of standard approach lighting systems and lists of other systems which may be given the same visibility credit in the development of military procedures.

f. Appendix 6. Alphabetical Index.

2. GLOSSARY. Definitions shown in this glossary apply to Terminal Instrument Procedures Criteria in this Handbook.

AL Approach and Landing (Chart).

Angle of Divergence (Minimum) The smaller of the angles formed by the intersection of two courses, radials, bearings, or combinations thereof.

Approach Surface Baseline An imaginary horizontal line at threshold elevation.

Approving Authority Headquarters representatives of the various signatory authorities shown in the Foreword, Page iv.

BC Back Course (Localizer).

Circling Approach Area The area in which aircraft circle to land under visual conditions after completing an instrument approach.

Controlling Obstacle The highest obstacle relative to a prescribed plane within a specified area.

Note: In precision approach procedures where obstacles penetrate the approach surface, the controlling obstacle is the one which results in the requirement for the highest decision height (DH).

Dead Reckoning The estimating or determining of position by advancing an earlier known position by the application of direction and speed data. For example, flight based on a heading from one VORTAC azimuth and distance fix to another is dead reckoning.

Diverse Vector An instruction issued by a radar controller to fly a specific course which is not a part of a predetermined radar pattern. Also referred to as a "random vector".

Decision Height (DH) The height, specified in MSL, above the highest runway elevation in the touchdown zone at which a missed approach shall be initiated if the required visual reference has not been established. This term is used only in procedures where an electronic glide slope provides the reference for descent, as in ILS or PAR.

DME Arc A course, indicated as a constant DME distance, around a navigation facility which provides distance information.

DME Distance The line of sight distance (slant range) from the source of the DME signal to the receiving antenna.

FAC Final Approach Course.

FAF Final Approach Fix.

Flight Inspection In-flight investigation and certification of certain operational performance characteristics of electronic and visual navigation facilities by an authorized inspector in conformance with the U.S. Standard Flight Inspection Manual.

Gradient A slope expressed in feet per mile, or as a ratio of the horizontal to the vertical distance. For example, 40:1 means 40 feet horizontally to 1 foot vertically.

GPI Ground Point of Intercept. A point in the vertical plane on the runway centerline at which it is assumed that the straight line extension of the glide slope intercepts the runway approach surface baseline.

HAA Height above airport elevation.

HAT Height above touchdown zone elevation.

IAC Initial Approach Course.

IAF Initial Approach Fix.

IC Intermediate Course.

IF Intermediate Fix.

JAL High Altitude Approach and Landing (Chart).

LOC Localizer. The component of an ILS which provides lateral guidance with respect to the runway centerline.

LDA Localizer type directional aid. A facility of comparable utility and accuracy to a LOC, but which is not part of a full ILS and may not be aligned with the runway.

MAP Missed Approach Point (Paragraph 272).

MDA Minimum Descent Altitude (Paragraph 320).

MHA Minimum Holding Altitude.

NDB(ADF) A combined term which indicates that a nondirectional beacon (NDB) provides an electronic signal for use with airborne automatic direction finding (ADF) equipment.

Obstacle An existing object, object of natural growth, or terrain at a fixed geographical location, or which may be expected at a fixed location within a prescribed area, with reference to which vertical clearance is or must be provided during flight operation. For example, with reference to mobile objects, a moving vehicle 17 feet high is assumed to be on an Interstate highway, 15 feet high on other highways, and 23 feet high on a railroad track, except where limited to certain heights controlled by use or construction. The height of a ship's mast is assumed according to the types of ships known to use an anchorage.

Obstacle Clearance The vertical distance between the lowest authorized flight altitude and a prescribed surface within a specified area.

Obstacle Clearance Boxes 500 when used in figures which depict approach segments these boxes indicate the obstacle clearance requirements in feet.

Operational Advantage An improvement which benefits the users of an instrument procedure. Achievement of lower minimums or authorization for a straight-in approach with no derogation of safety are examples of an operational advantage. Many of the options in TERPs are specified for this purpose. For instance, the flexible final approach course alignment criteria may permit the ALS to be used for reduced visibility credit by selection of the proper optional course.

Optimum Most favorable. As used in TERPs, optimum identifies the value which should be used wherever a choice is available.

Positive Course Guidance A continuous display of navigational data which enables an aircraft to be flown along a specific course line.

Precipitous Terrain Terrain characterized by steep or abrupt slopes.

Precision and Nonprecision These terms are used to differentiate between navigational facilities which provide a combined azimuth and glide slope guidance to a runway (Precision) and those which do not. The term nonprecision refers to facilities without a glide slope, and does not imply an unacceptable quality of course guidance.

Primary Area The area within a segment in which full obstacle clearance is applied.

ROC Required Obstacle Clearance.

Runway Environment The runway threshold or approved lighting aids or other markings identifiable with the runway.

Secondary Area The area within a segment in which ROC is reduced as distance from the prescribed course is increased.

Segment The basic functional division of an instrument approach procedure. The segment is oriented with respect to the course to be flown. Specific values for determining course alignment, obstacle clearance areas, descent gradients, and obstacle clearance requirements are associated with each segment according to its functional purpose.

Service Volume That volume of airspace surrounding a VOR, TACAN, or VORTAC facility within which a signal of usable strength exists and where that signal is not operationally limited by cochannel interference. The advertised service volume is defined as a simple cylinder of airspace for ease in planning areas of operation.

Threshold Crossing Height The height of the straight line extension of the glide slope above the runway at the threshold.

TDZ Touchdown Zone.

Touchdown Zone The first 3000 feet of runway beginning at the threshold.

Touchdown Zone Elevation The highest runway centerline elevation in the touchdown zone.

Transition Level The flight level below which heights are expressed in feet MSL and are based on an approved station altimeter setting.

Visual Descent Point (VDP) The visual descent point is a defined point on the final approach course of a nonprecision straight-in approach procedure from which normal descent from the MDA to the runway touchdown point may be commenced, provided visual reference is established.